

### **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

#### **LISTING OF CLAIMS:**

1. (currently amended): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

2. (original): The cleaning sheet as claimed in claim 1, wherein the vinyl polymer is an acrylic polymer.

3. (currently amended): The cleaning sheet as claimed in claim 1, wherein the cleaning layer ~~comprises~~ is formed by irradiating radiation to a mixture containing a urethane polymer and a vinyl monomer, ~~being irradiated with radiation to cure it~~ and contains the urethane polymer and a vinyl polymer.

4. (original): The cleaning sheet as claimed in claim 1, wherein the cleaning layer is formed by reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form the urethane polymer to form a mixture containing the urethane polymer and a vinyl monomer, and irradiating the mixture with radiation to cure it.

5. (original): The cleaning sheet as claimed in claim 1, further comprising a backing layer.

6. (original): The cleaning sheet as claimed in claim 5, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.

**7.-12. (canceled)**

13. (original): A transporting member comprising a support and the cleaning layer of claim 1 provided on the support.

14. (original): The transporting member as claimed in claim 13, wherein the cleaning sheet is provided on the support through a sticking means.

15. (original): The transporting member as claimed in claim 13, wherein the support is a wafer.

**16.-18. (canceled)**

19. (currently amended): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer;

coating the mixture on a release sheet or a backing layer; and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu$ m.

20. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein, said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu$ m.

21. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu$ m.

22. (currently amended): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning

layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

23. (previously presented): The cleaning sheet as claimed in claim 22, further comprising a backing layer.

24. (previously presented): The cleaning sheet as claimed in claim 23, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.

25. (previously presented): A transporting member comprising a support and the cleaning layer of claim 22 provided on the support.

26. (currently amended): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer;

coating the mixture on a release sheet or a backing layer:

and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm<sup>2</sup> and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the

foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu\text{m}$ .

27. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100  $\text{N/mm}^2$  and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu\text{m}$ .

28. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, and wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100  $\text{N/mm}^2$  and is adapted to receive penetrating probe needles and remove and retain impurities ~~on~~ from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500  $\mu\text{m}$ .